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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,077	04/25/2001	Masashi Yamawaki	02416-00008	5889

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EXAMINER
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TORRES, JUAN A

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/841,077

Applicant(s)

YAMAWAKI, MASASHI

Examiner

Juan A. Torres

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 12 is objected to because of the following informalities: the recitation in line 2 of claim 12 “the predetermined mark for detecting synchronization are detected” (emphasis added) is improper, because it is not properly constructed; it is suggested to be changed to “the predetermined mark for detecting synchronization is detected” (emphasis added). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

In view of the amendment filed on 03/07/2006, the Examiner withdraws claim rejections under 35 USC 112 second paragraph to claims 2-7 and 17 of the previous Office action.

### ***Response to Arguments***

#### **Regarding claims 1 and 10:**

Applicant's arguments filed on 03/07/2006 have been fully considered but they are not persuasive.

The Applicant contends, “The Applicants submit that Wilson neither discloses nor suggests at least the combination of a plurality of detecting units being provided at each bit position of the parallel data, the detecting units being adapted to detect whether strings of bits continuing from each bit position as a starting point are the predetermined mark; and wherein any one of the detecting units detects the predetermined mark, as recited in claims 1 and 10, as amended”.

The Examiner disagrees and asserts, that, Wilson discloses a receiving unit for receiving a series of data including a predetermined mark for detecting synchronization and generating a plurality of parallel data from the series of data (figure 5 block 510 column lines 7 lines 48-56); and a plurality of detecting units being provided at each bit position of the parallel data (figure 5 block 518 column 8 lines 47-54), the detecting units being adapted to detect whether strings of bits continuing from each bit position as a starting point are the predetermined mark (figure 5 block 528 column 8 lines 12-65); and where any one of the detecting units detects the predetermined mark (figure 5 block 518 column 8 lines 12-65). For these reasons and the reason stated en the previous Office action, the rejection of claims 1 and 10 are maintained.

Regarding claims 11:

Applicant's arguments filed on 03/07/2006 have been fully considered but they are not persuasive.

The Applicant contends, "Applicants submit that claim 11, as amended, is allowable over Wilson at least because Wilson does not disclose or suggest at least the combination of receiving a series of data including a predetermined mark for detecting synchronization', generating a parallel data from the series of data; detecting the predetermined mark for detecting synchronization from any one of strings of bits continuing from each bit position of the parallel data to establish synchronization of the series of data; and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit strings".

The Examiner disagrees and asserts, that, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16). For these reasons and the reason stated en the previous Office action, the rejection of claim 11 is maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9-16, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson (US 6118603 A).

As per claims 1 and 10, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508

column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16).

As per claim 11, Wilson discloses receiving a series of data including a predetermined mark for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined mark for detecting synchronization from any one of the streams of bits continuing from each bit position of the parallel data to establish synchronization of the series of data (figure 5 block 518 column 8 lines 47-65); and demodulating the series of data based on the predetermined mark for detecting synchronization detected from one of the bit streams (figure 5 blocks 538 and 556; column 8 lines 12-65; and column 11 lines 8-16)

As per claims 2 and 12, Wilson discloses claims 1 and 11. Wilson also discloses detecting the predetermined mark for detecting synchronization in a predetermined bit width among the series of data in parallel condition (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claims 3 and 13, Wilson discloses claims 1 and 11. Wilson also discloses generation timing for selecting generation timing of the window for detecting the predetermined mark based on the predetermined mark for detecting synchronization (figure 5 block 506 column 7 lines 44-46).

As per claim 4, Wilson discloses claim 1. Wilson also discloses a data demodulating unit for demodulating the series of data between the predetermined mark for detecting synchronization based on the predetermined mark for detecting synchronization (figure 5 block 556 column 11 lines 8-16).

As per claims 5 and 14, Wilson discloses claims 1 and 11. Wilson also discloses a detection line memory for storing a detection line based on the predetermined mark for detecting synchronization (column 11 line 66 to column 12 line 8).

As per claims 6 and 15, Wilson discloses claims 1 and 11. Wilson also discloses selecting data based on the predetermined mark for detecting synchronization (figure 5 block 564 column 11 lines 54-65).

As per claims 7 and 16, Wilson discloses claims 1 and 11. Wilson also discloses counting the series of data between the predetermined mark for detecting synchronization based on the predetermined mark for detecting synchronization (figure 5 block 542 and figures 6 and 7 column 9 lines 15-23).

As per claim 9, Wilson discloses claim 1. Wilson also discloses a shift register to input the plurality of parallel bits connected with the detecting units in the same number as the number of parallel data (figure 5 block 510 column 7 lines 56-58; and column 8 lines 13-65).

As per claims 18 and 19, Wilson discloses claims 1 and 10. Wilson also discloses that the plurality of detecting units are provided in equal number to the number of bits constituting the parallel data (figure 5 block 518; column 8 lines 47-54).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone



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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres  
05-25-2006

TEMESGHEN GHEBRETISSAE  
PRIMARY EXAMINER  
05/25/06